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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/551,638

07/31/2006

Manfred Rahm

05-664

5482

34704 7590 10/20/2008

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EXAMINER

HEINRICH, SAMUEL M

ART UNIT

PAPER NUMBER

3742

MAIL DATE

DELIVERY MODE

10/20/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/551,638	Applicant(s) RAHM, MANFRED	
	Examiner Samuel M. Heinrich	Art Unit 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, parenthetical limitations (lines 2, 3, 5, 7, 8, 9, 10) cause the scope of the claim to be unclear.

Claims 2-8 also contain parenthetical limitations which causes the scope of each claim to be unclear.

Claim 1 is written in narrative form and does not clearly recite the method, for example, lines 5 and 6, "the accurate position and/or angle of which is essential to the function" does not clearly describe a position or angle. Claim 1, lines 12 and 13, "stresses produce deformations which are opposed to the stresses to be expected" does not clearly describe the deformations and how they opposed to the stresses to be expected. Claim 1, line 13, "the subsequent welding" is not a positive process step.

Claim 8 does not clearly describe whether the beam is a broadly claimed high energy beam or a more particularly claimed laser beam.

All claims 1-8 must be reviewed in order to ensure that they provide clear descriptions of the invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of USPN 6,410,165 to Warren et al in view of USPN 4,406,640 to Franklin et al.

AAPA describes (Specification, pages 1 and 2) well known rotationally fixed connections comprising pressed on, shrinking on, body-fit bolts, and welding, but do not describe a symmetrical part which is shrunk on or pressed on to a hub and subsequently welded.

Warren et al show (Figure 3) and describe (column 4, lines 21-31, and column 6, lines 37-57) a weld joint 20 which further secures shaft 16 which is press fit into hub 18.

Franklin et al describe (column 2, lines 36-42) joining comprising a press fit and subsequent laser welding.

The use of both press fit and laser weld would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because the weld provides a second or back-up positive joint connection.

Claims 2-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of USPN 6,410,165 to Warren et al in view of USPN 4,406,640 to Franklin et al as applied to claim 1 above, and further in view of USPN 3,834,138 to Gibson.

Gibson describes (Figure 5) interference fit of parts having different radii provided between parts 24 and 26. The use of an interference fit of parts, at least on part having different radii along the axial direction, would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because the assembly of parts is initiated more easily with one tapered workpiece.

Tapering one part or the other part would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art depending upon available machining capabilities.

Changing the location of the constricted areas would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art depending on the shapes and sizes of the workpieces.

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of USPN 6,410,165 to Warren et al in view of USPN 4,406,640 to Franklin et al as applied to claim 1 above, and further in view of USPN 4,768,750 to Wilson.

Wilson shows (Front Page) a tapered pin and boss interference fit which provides stress in a desired location. The use of a particular location for secure interference fit of a rotationally symmetrical part and a hub would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art depending on the shapes and sizes of the work parts.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel M. Heinrich whose telephone number is 571-272-1175. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu B. Hoang can be reached on 571-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Samuel M Heinrich/
Primary Examiner, Art Unit 3742